

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
22 April 2004 (22.04.2004)

PCT

(10) International Publication Number  
**WO 2004/033583 A2**

(51) International Patent Classification<sup>7</sup>: **C09K 11/00**

(21) International Application Number:  
PCT/IT2003/000555

(22) International Filing Date:  
19 September 2003 (19.09.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
RM2002A000513 10 October 2002 (10.10.2002) IT

(71) Applicants (for all designated States except US): ENTE  
PER LE NUOVE TECNOLOGIE, L'ENERGIA E  
L'AMBIENTE (ENEA) [IT/IT]; Lungotevere Thaon di  
Revel, 76, I-00196 Roma (IT). INFO & TECH S.R.L.  
[IT/IT]; Via Manzini 21, I-33100 Udine UD (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): BALDACCHINI,  
Giuseppe [IT/IT]; c/o Enea, Centro Ricerche Frascati,  
Via Enrico Fermi 45, I-00044 Frascati RM (IT). PACE,  
Angelo [IT/IT]; c/o Enea, Centra Ricerche Frascati,

Via Enrico Fermi, 45, I-00044 Frascati RM (IT). BAL-  
DACCHINI, Tommaso [IT/IT]; Via G. Quattrucci, 246,  
I-00046 Grottaferrata RM (IT). PODE, Ramchandra,  
Balaji [IN/IN]; Department of Physics, Nagpur University,  
IN-440010 Nagpur (IN).

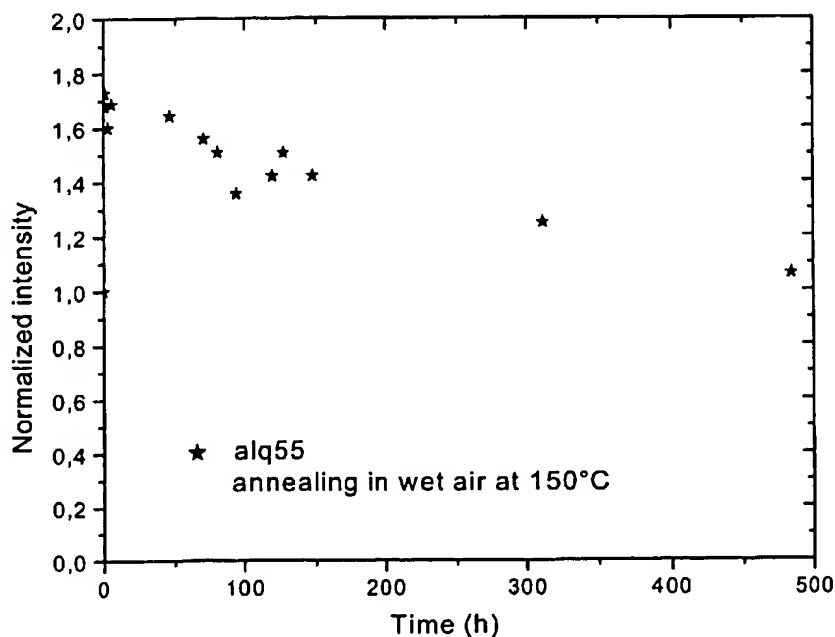
(74) Agents: GERMINARIO, Claudio et al.; c/o Società Ital-  
iana Brevetti S.p.A., Piazza di Pietra 39, I-00186 Roma  
(IT).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,  
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,  
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,  
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,  
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,  
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,

[Continued on next page]

(54) Title: METHOD OF PREPARING ORGANIC LUMINESCENT MATERIALS STABILIZED BY HEAT TREATMENT AND MATERIALS THUS OBTAINED



(57) Abstract: The present invention relates to methods of preparing and stabilizing organic luminescent materials by means of heat treatment (annealing) in a suitable atmosphere. The treatment performed on films of such materials deposited on an inert support causes an immediate increase of the luminescence and a stabilization of the emission in ambient atmosphere for at least 500 hours.



SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

- *without international search report and to be republished upon receipt of that report*